

ADDITIONAL FEE

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R E M A R K S

The Office Action issued August 12, 2009 has been received and its contents have been carefully considered.

Claim 27 has been amended in the manner kindly suggested by the Examiner to overcome the rejection under 35 U.S.C. Sections 101 and 112.

All the claims of this application have again been rejected under 35 USC §103 as being unpatentable over three of the following four references:

U.S. Patent No. 4,561,545 to Carlow for a "Sorting Conveyor";

U.S. Patent No. 5,167,141 to Carrara for a "Seal Withdrawal and Testing Device";

U.S. Patent No. 6,311,919 to Hermanns et al. for a "Yarn Guide..."; and

U.S. Patent No. 5,621,591 to Rahimi et al. for a "Dual Coil Voice Coil Motor."

Claims 1 and 3-25 have been rejected over Carlow, Hermanns et al. and Rahimi et al. Claims 1, 2 5 - 22 and 27 have been rejected over Carrara, Hermanns et al. and Rahimi et al. These rejections are respectfully traversed for the reasons given below.

As pointed out in the Remarks Section of applicants' Amendment filed April 27, 2009, Hermanns et al. and Rahimi et al. have absolutely nothing to do with sorting devices so there is no reason that a person skilled in the art would consider these references when designing a new and improved sorting device.

In particular, a skilled person in the field of devices for sorting different materials would hardly research the field yarn guides (Hermanns et al.) or voice coil motors (Rahimi et al.) to find hints for designing a sorting device or an actuator for such a device. The combination of references applied against the claims could only be known with hindsight; that is, if a skilled person already knew the present invention. Only then it is possible to look for technical details in the state of the art in order to combine them. This type of ex post facto rejection is not permissible under the Patent Law.

The combination of references, Carlow, Hermanns et al. and Rahimi et al. would be possible only if a person skilled in the art would find in Carlow the advice (instruction) to look for solutions in the field of "yarn guides" and/or in the field of "dual coil voice coil motors" in order to replace the ramp actuators (RSA) as known in Figure 2 of the patent. However, Carlow deals mainly with the circuits as shown in Figures 1a, 1b, 3, 4, 5a, 5b and 5c. Only Figure 2 shows hardware components of the device that are comparable with the present invention.

True, Carlow has mentioned in column 9, line 64, to column 10, line 4, that the ramp actuators (RSA) can be hydraulic or electromagnetic or other suitable types. But Figure 2 shows large, robust elements in the form of rods and hydraulic or pneumatic actuators which are designed for rough environments.

Furthermore, the stated object of Carlow points in the opposite direction to that of the present invention. Carlow's objective is to provide an improved sorting technique which is more flexible, and which is not constrained by the need for an object array of individual sites in an array.

The solution to this objective taught by this patent is to identify the position of the objects - and not to redesign the actuators. Carlow does not mention any necessity or requirement to use actuators other than those described in connection with Figure 2 of the patent. Carlow fails to even point to the problem solved by the present invention, not to mention the solution to this problem which is given by the present invention.

Carrara does not refer to sorting, but to testing and withdrawing seals from manufacturing molds. Also Carrara does not sense pieces of material in a location-dependent manner on a conveyor belt, because all positions are fixed one behind the next. The deflector 34 is therefore not of major relevance. It is a "known deflecting device" (see column 2, line 66) which has to withdraw only one device if the seal is imperfect. This device has plenty of time to operate during the test operation of the next seal so there is no requirement for speed and precision of the deflector 34. Also the position of the seal (mold) is always exactly fixed. Carrara does not mention the need to use another kind of deflector.

In view of this background, it is not apparent why a person skilled in the art should, or would, look for other

devices than those shown in Carlow or Carrara. It is also not apparent why a person skilled in the art would look to references like Hermanns et al. or Rahimi et al.

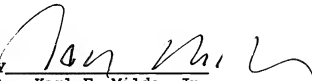
The Patent Law does not require that a person skilled in a particular art know everything about all technical fields in addition to his/her own. In the present case, a person skilled in the art would have to overcome or negotiate all preconceptions to use highly sensitive actuators, according to the invention. The yarn guide of Rahimi et al. has only to guide the position of the yarn, which can be done without high forces, so that a person skilled in the art would not assume that such a yarn guide could also be used as an actuator in sorting devices.

Again, it is not permissible to require a person skilled in the art to look or search, feature-by-feature, in the state of the art to design a device such as the present invention.

Accordingly, it is believed that independent claim 1, as well as independent claim 27, which tracks the language of claim 1, distinguish patentably over all of the references of record. Since all of the remaining claims of this application are dependent, either directly or indirectly, from claim 1, this application is believed to be

in condition for immediate allowance. A formal Notice of Allowance is accordingly respectfully solicited.

Respectfully submitted,

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